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SECTION 01732 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of selected portions of building or interior architectural woodwork.
2. Salvage of existing items to be reused or recycled.

1.2 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged or removed and reinstalled.

B. Remove and Salvage: Carefully detach from existing construction, in a manner to prevent damage, and deliver to Owner ready for reuse.

C. Remove and Reinstall: Detach items from existing construction, prepare for reuse, and reinstall where indicated.

D. Existing to Remain: Existing items of construction that are not to be permanently removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.3 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site.

1.4 INFORMATIONAL SUBMITTALS

A. Predemolition Photographs or Video: Submit before Work begins.

1.5 FIELD CONDITIONS

A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.

B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

1. Before selective demolition, Owner will clear all loose materials from the existing security desk.

C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.

D. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
1. If suspected hazardous materials are encountered, do not disturb; immediately notify Architect and Owner. Hazardous materials will be removed by Owner under a separate contract.

E. Storage or sale of removed items or materials on-site is not permitted.

F. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.

1.6 WARRANTY

A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials so as not to void existing warranties.

PART 2 - PRODUCTS

2.1 PEFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that utilities have been disconnected and capped before starting selective demolition operations.

B. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.

C. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to Architect.

D. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or preconstruction videotapes.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.

1. Comply with requirements for existing services/systems interruptions specified in Section 01100 "Summary."

B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off indicated utility services and mechanical/electrical systems serving areas to be selectively demolished.

1. Building manager will arrange to shut off indicated services/systems when requested by Contractor.
2. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.
3. Disconnect, demolish, and remove fire-suppression systems, plumbing, and HVAC systems, equipment, and components as required by the new work.

    a. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.
    b. Piping to Be Abandoned in Place: Drain piping and cap or plug piping with same or compatible piping material.
    c. Equipment to Be Removed: Disconnect and cap services and remove equipment.
    d. Equipment to Be Removed and Reinstalled: Disconnect and cap services and remove, clean, and store equipment; when appropriate, reinstall, reconnect, and make equipment operational.
    e. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.

3.3 PREPARATION

A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.

B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.

3.4 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

1. Neatly cut openings and holes plumb, square, and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping, to minimize disturbance of adjacent surfaces. Temporarily cover openings to remain.
2. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
3. Do not use cutting torches until work area is cleared of flammable materials. At concealed spaces, such as duct and pipe interiors, verify condition and contents of hidden space before starting flame-cutting operations. Maintain fire watch and portable fire-suppression devices during flame-cutting operations.
4. Locate selective demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
5. Dispose of demolished items and materials promptly.

B. Removed and Salvaged Items:

1. Clean salvaged items.
2. Pack or crate items after cleaning. Identify contents of containers.
3. Store items in a secure area until delivery to Owner.
4. Transport items to Owner's storage area designated by Owner.
5. Protect items from damage during transport and storage.

C. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
2. Pack or crate items after cleaning and repairing. Identify contents of containers.
3. Protect items from damage during transport and storage.
4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.

D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 DISPOSAL OF DEMOLISHED MATERIALS

A. General: Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain Owner's property, remove demolished materials from Project site and legally dispose of them in an EPA-approved landfill.

1. Do not allow demolished materials to accumulate on-site.

2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

B. Burning: Do not burn demolished materials.

C. Disposal: Transport demolished materials off Owner's property and legally dispose of them.

3.6 CLEANING

A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 01732

SECTION 05500 - METAL FABRICATIONS

PART 4 - GENERAL

4.1 SUMMARY

A. Section Includes:

1. Miscellaneous steel framing and supports.
2. Steel Tube columns.
3. Miscellaneous steel trim.
4. Loose bearing and leveling plates.

B. Products furnished and installed under this Section:
1. Anchor bolts, steel pipe sleeves, slotted-channel inserts, and wedge-type inserts indicated to be cast into concrete or built into unit masonry.

4.2 ACTION SUBMITTALS

A. Shop Drawings: Show fabrication and installation details for metal fabrications.

1. Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.

PART 5 - PRODUCTS

5.1 METALS, GENERAL

A. Metal Surfaces, General: Provide materials with smooth, flat surfaces without blemishes.

5.2 FERROUS METALS

A. Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.

B. Steel Tubing: ASTM A 500, cold-formed steel tubing.

5.3 FASTENERS

A. General: Unless otherwise indicated, provide zinc-plated fasteners with coating complying with ASTM B 633 or ASTM F 1941 (ASTM F 1941M), Class Fe/Zn 5.

B. Post-Installed Anchors: Torque-controlled expansion anchors or chemical anchors.

1. Material for Interior Locations: Carbon-steel components zinc plated to comply with ASTM B 633 or ASTM F 1941 (ASTM F 1941M), Class Fe/Zn 5, unless otherwise indicated.

5.4 MISCELLANEOUS MATERIALS

A. Universal Shop Primer: Fast-curing, lead- and chromate-free, universal modified-alkyd primer complying with MPI#79 and compatible with topcoat.

B. Epoxy Zinc-Rich Primer: Complying with MPI#20 and compatible with topcoat.

C. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.

D. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

E. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.

5.5 FABRICATION, GENERAL

A. Shop Assembly: Preassemble items in the shop to greatest extent possible. Use connections that maintain structural value of joined pieces.

B. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.

C. Weld corners and seams continuously to comply with the following:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended.

D. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners or welds where possible. Locate joints where least conspicuous.

5.6 MISCELLANEOUS FRAMING AND SUPPORTS

A. General: Provide steel framing and supports not specified in other Sections as needed to complete the Work.

B. Fabricate units from steel shapes, plates, and bars of welded construction unless otherwise indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to receive adjacent construction.

5.7 MISCELLANEOUS STEEL TRIM

A. Unless otherwise indicated, fabricate units from steel shapes, plates, and bars of profiles shown with continuously welded joints and smooth exposed edges. Miter corners and use concealed field splices where possible.

B. Provide cutouts, fittings, and anchorages as needed to coordinate assembly and installation with other work.

C. Prime miscellaneous steel trim with zinc-rich primer.

5.8 LOOSE BEARING AND LEVELING PLATES

A. Provide loose bearing and leveling plates for steel items bearing on masonry or concrete construction. Drill plates to receive anchor bolts and for grouting.

5.9 STEEL WELD PLATES AND ANGLES

A. Provide steel weld plates and angles not specified in other Sections, for items supported from concrete construction as needed to complete the Work. Provide each unit with no fewer than two integrally welded steel strap anchors for embedding in concrete.

5.10 FINISHES, GENERAL

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Finish metal fabrications after assembly.

5.11 STEEL AND IRON FINISHES

A. Galvanizing: Hot-dip galvanize items as indicated to comply with ASTM A 153/A 153M for steel and iron hardware and with ASTM A 123/A 123M for other steel and iron products.

B. Shop prime iron and steel items not indicated to be galvanized unless they are to be embedded in concrete, sprayed-on fireproofing, or masonry, or unless otherwise indicated.

C. Preparation for Shop Priming: Prepare surfaces to comply with requirements indicated below:
   1. Items Indicated to Receive Zinc-Rich Primer: SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
   2. Other Items: SSPC-SP 3, "Power Tool Cleaning."

D. Shop Priming: Apply shop primer to comply with SSPC-PA 1, "Paint Application Specification No. 1: Shop, Field, and Maintenance Painting of Steel," for shop painting.

E. High-Performance Architectural Latex System:
   1. Prime Coat: Primer, alkyd, anti-corrosive, for metal, MPI #79.
   2. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
   3. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3), MPI #139.

PART 6 - EXECUTION

6.1 INSTALLATION, GENERAL

A. Cutting, Fitting, and Placement: Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, alignment, and elevation; with edges and surfaces level, plumb, true, and free of rack; and measured from established lines and levels.

B. Fit exposed connections accurately together to form hairline joints. Weld connections that are not to be left as exposed joints but cannot be shop welded because of shipping size limitations. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication and are for bolted or screwed field connections.

C. Field Welding: Comply with the following requirements:

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
2. Obtain fusion without undercut or overlap.
3. Remove welding flux immediately.
4. At exposed connections, finish exposed welds and surfaces smooth and blended.

D. Fastening to In-Place Construction: Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction.

E. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.

6.2 INSTALLING BEARING AND LEVELING PLATES

A. Clean concrete and masonry bearing surfaces of bond-reducing materials, and roughen to improve bond to surfaces. Clean bottom surface of plates.

B. Set bearing and leveling plates on wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts. Do not remove wedges or shims but, if protruding, cut off flush with edge of bearing plate before packing with grout.

C. Pack grout solidly between bearing surfaces and plates to ensure that no voids remain.

6.3 ADJUSTING AND CLEANING

A. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas. Paint uncoated and abraded areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

B. Galvanized Surfaces: Clean field welds, bolted connections, and abraded areas and repair galvanizing to comply with ASTM A 780.

END OF SECTION 05500

SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:
1. Custom casework security station

a. Stile and rail panel fronts with transparent finish
b. Wood countertops and rails with transparent finish
c. Solid surface tops.
d. Linoleum surface counters.
e. Security glazing fabrication.
f. Firearm (pistol) prefabricated locker

2. Shop finishing interior woodwork.

1.2 DEFINITIONS

A. Interior architectural woodwork includes wood furring, blocking, shims, and hanging strips for installing woodwork items, unless concealed within other construction before woodwork installation.

B. For purposes of this contract, "Architectural Woodwork" includes (1) rough carpentry (2) millwork/ casework type items, (3) multi-piece American black cherry standing and running trim and rails associated with new security station, and (4) some specialty work requiring both shop fabricated and field assembled high quality woodwork items. Some of the work could traditionally be considered "finish carpentry;" because of the special composite construction and generally high quality required, all is considered "architectural woodwork."

1.3 SUBMITTALS

A. Product Data: For each type of product indicated, including cabinet hardware and accessories, and finishing materials and processes.

1. Include data for ballistic armor.
2. Include data for security glazing material and accessories.
3. Include data for Firearm (pistol) prefabricated locker.

B. Shop Drawings: Show location of each item, dimensioned plans and large elevations, scale details, attachment devices, and other components.

1. Show locations and sizes of furring, blocking, and hanging strips, including concealed blocking and reinforcement specified in other Sections.
2. Show locations and sizes of cutouts and holes for electrical devices, grommets, and other items installed in architectural woodwork.
3. Show steel framing fabrication for security glazing and security glazing screen.
4. Show stainless steel-clad countertop assembly.

C. Samples for match to existing building interior architectural woodwork:

1. Lumber with transparent finish, 5 inches wide by 24 inches long for each species and cut, finished on 1 side and 1 edge.
2. Wood-veneer-faced panel products with transparent finish, minimum 8 by 10 inches, for each species and cut. Include at least one face-veneer seam and finish as specified.

D. Product Certificates: Signed by manufacturers of woodwork certifying that products furnished comply with requirements.

E. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

1.4 QUALITY ASSURANCE

A. Fabricator Qualifications: A firm experienced in producing architectural woodwork similar to that indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

B. Source Limitations: Engage a qualified woodworking firm to assume undivided responsibility for production and installation of interior architectural woodwork.

C. Quality Standard: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Quality Standards" 8th Edition Version 1.0 (2005) for grades of interior architectural woodwork, construction, finishes, and other requirements.

1. Provide AWI Quality Certification Program labels or certificate indicating that woodwork complies with requirements of grades specified.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver woodwork until operations that could damage woodwork have been completed in installation areas. If woodwork must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

1.6 PROJECT CONDITIONS

A. Owner's continuing security operations: The court facility's security screening function must remain in operation during normal business hours. Security screening of incoming public shall continue throughout the course of the project. Contractor shall anticipate and include after hours work (nights, weekends, holidays) and all temporary security provisions required to maintain the Sheriff's security screening operations. For allowable hours of work and temporary provision requirements, contact the James City County courthouse superintendent, Mr. Frank Dimes, at (757)564-2230.

B. Field Measurements: Where woodwork is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1. Locate concealed framing, blocking, and reinforcements that support woodwork by field measurements before being enclosed and indicate measurements on Shop Drawings.

2. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating woodwork without field measurements. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.

1.7 COORDINATION

A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that interior architectural woodwork can be supported and installed as indicated.

PART 2 – PRODUCTS

2.1 MATERIALS

A. General: Provide materials that comply with requirements of the AWI quality standard for each type of woodwork and quality grade specified, unless otherwise indicated

B. Wood Species and Cut for Transparent Finish: American Black Cherry, to match existing, plain sawn or sliced.

C. Wood Products: Comply with the following:
   1. Hardboard: AHA A135.4.
   2. Medium-Density Fiberboard: ANSI A208.2, Grade MD.
   3. Particleboard: ANSI A208.1, Grade M-2.
   4. Hardwood Plywood and Face Veneers: HPVA HP-1.

D. Linoleum Sheet Desktop Writing Surface: "Desk grade" linoleum sheet conforming to ASTM F 2034, solid color, in 0.125-inch thickness. Provide black color.

   1. Sheet Products: Subject to compliance with requirements, provide one of the following:
      a. Armstrong World Industries, Inc.; "Uni Walton."
      b. Domco-Tarkett U.S.A Inc. Linsom™ "Etrusco.
      c. Forbo Industries, Inc.; "Walton" or "Marmoleum Desktop."

E. Firearm (pistol) prefabricated locker: Drill resistant storage unit with cylinder lock and foam lined bottom. Card holder on front for ID purposes. Interior sliding shelf. Provide under counter mounting hardware and two keys.
   1. Provide "Pistol Lockbox with Pull-Out Shelf", as manufactured by Gals, Inc., or approved comparable product.

2.2 FIRE-RETARDANT-TREATED MATERIALS ("FRT")

A. General: All internal structural framing and blocking that is part of the architectural woodwork fabrication shall be fire retardant treated material. No actual finish woodwork items (trim, casings, bases, casework panel and worked lumber components etc.) are fire retardant treated.

2.3 CABINET HARDWARE AND ACCESSORIES

A. Hardware Standard: Comply with BHMA A156.9 for items indicated by referencing BHMA numbers or items referenced to this standard.

B. Gate Spring Pivot Hinge - Double-Acting: Mortised application, BHMA A156.17, K13321 or K63321ball-bearing pivot with fixed spring tension. Provide jamb bracket width to suit gate/door thickness. Design standard is Bommer Type 7022. www.bommer.com

C. Back-Mounted Pulls: BHMA A156.9, B02011. Provide standard satin anodized aluminum wire pulls, 4 inches long by 5/16 inches in diameter, unless directed otherwise.

D. Drawer Slides: Side-mounted, full-extension, zinc-plated steel drawer slides with steel ball bearings, BHMA A156.9, B05091, and rated for the following loads. Nylon-tired roller type slides (Blum, Mepla, Grass America) are not acceptable.
   1. Box Drawer Slides: 100 lbf. Accuride #7432 or Knape & Vogt #KV8414

2. File Drawer Slides: 150 lbf Accuride #4032 or Knape & Vogt #KV8500
3. Pencil Drawer Slides: 45 lbf. Accuride #2006 or Knape & Vogt #KV8200/8250

E. Drawer Locks: BHMA A156.11, E07041.

F. Grommets for Cable Passage through Countertops: 2-inch OD, black, molded-plastic grommets and matching plastic caps with slot for wire passage.
1. Product: Provide "SG series" by Doug Mockett and Co., Inc. www.mockett.com

G. Ballistic Armor: Provide lightweight ballistic armor produced to afford protection for .44 Magnum bullet with 240 grain lead, and muzzle velocity of 1470 feet per second tested in accordance with UL 752 ballistic testing. Product shall be fiberglass reinforced composite structural flat sheet material of nominal 1/2" thickness indicated equal to *"Life-Gard Ballistic Armor Type LG-4"* manufactured by Point Blank Body Armor, Inc. (Phone: 800-645-4443) or *"Armortex product O.F.300"* manufactured by Safeguard Security Systems, Inc. (Phone: 512-661-8306).

H. Exposed Hardware Finishes: For exposed hardware, provide finish that complies with BHMA A156.18 for BHMA finish number indicated.

I. For concealed hardware, provide manufacturer's standard finish that complies with product class requirements in BHMA A156.9.

2.4 INSTALLATION MATERIALS

A. Furring, Blocking, Shims, and Hanging Strips: Softwood or hardwood lumber, kiln-dried to less than 15 percent moisture content.

B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

C. Steel Plates & Angles: ASTM A36, shop primed.

2.5 FABRICATION, GENERAL

A. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to ambient relative humidity during fabrication and in installation areas.

B. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.

C. Fabricate woodwork to dimensions, profiles, and details indicated. Ease edges to radius indicated for the following:
1. Corners of Cabinets and Edges of Solid-Wood (Lumber) Members 3/4 Inch Thick or Less: 1/16 inch.
2. Edges of Rails and Similar Members More Than 3/4 Inch Thick: 1/8 inch.

D. Complete fabrication, including assembly, finishing, and hardware application, to maximum extent possible, before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
1. Notify owner seven days prior to the dates and times woodwork fabrication will be complete.
2. Trial fit assemblies at fabrication shop that cannot be shipped completely assembled. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting. Verify that various parts fit as intended and check measurements of assemblies against field measurements indicated on Shop Drawings before disassembling for shipment.

E. Shop cut openings, to maximum extent possible, to receive hardware, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.
1. Seal edges of openings in countertops with a coat of varnish.

2.6 CUSTOM CASEWORK SECURITY STATION

A. General: Provide assemblies fabricated to dimensions, profiles & general details indicated and coordinated with related work provided under other sections of these specifications. Coordinate work with FRT rough carpentry framing.
   1. Provide internal construction and extent of prefabrication of complete assemblies in accordance with final shop drawings. Drawing indications of 2x lumber internal framing represent "generic" internal construction. Particleboard material is generally preferred for case type pieces. Similarly, joinery details indicated depict options conforming to "Premium" grade criteria specified.
   2. Provide for electrical wiring, cabling etc. required for complete installation. Coordinate all electrical device outlet locations.
   3. Provide stile-and-rail panel fronts as indicated in the drawings for indicated assemblies.
   4.

B. Quality Standards: Comply with AWI Sections and standards as follows:
   1. Section 400 and its Division 400C "Tops" for "Premium" grade for panel product countertops.
      a. Type of Top: Panel product for transparent finish (wood veneer laminated over various cores).
      b. Veneer Species: American Black Cherry, plain cut.
      c. Edge Treatment: Lumber matching wood veneer face for species and cut.
   2. Section 400 and its Division 400C "Tops" for "Premium" grade for linoleum countertops.
      a. Type of Top: Linoleum for writing surface tops (conforms to 400-C-G-2 for HPDL construction). Provide 0.125" thickness "desk grade" Linoleum in solid black color for bench top finish. (As manufactured by Forbo; telephone (800) 842-7839, or equal.)
      b. Edge Treatment: American Black Cherry, plain cut lumber edge with profiles as detailed.
   3. Section 500 and its Division 500C "Stile and Rail Paneling: Wood" for "Premium" grade as applies to panelized fronts of counter and table assemblies.
      a. Raised Panel: Panel product with mitered, splined, lumber rim, for painted finish.
      b. Veneer Species for Exposed Surfaces, Paint Finish: MDO panel product & close grain hard-wood lumber per AWI standard.
   4. Security Reception Counter: Provide assembly indicated, composed of shop and field constructed elements to best accomplish high quality, close tolerance work indicated & required. Include "cubicle" components in general composite assembly.
      a. Provide counter/casework assembly indicated, featuring painted panel & solid lumber components.
      b. Provide linoleum desk top; American black cherry veneer on panel product at other tops. Provide American black cherry lumber edge for transparent finish matching wood species on casework surfaces.
      c. Provide fiberglass armor protective front construction indicated; sequence construction to maintain continuity of this (firearm) barrier. Provide back-up strips of armor behind outlet locations securely fastened to solid blocking as indicated.
      d.

C. Security Glazing Screen Fabrication: Provide security glazing screen fabrication indicated integrated with casework assembly. Incorporate into shop-fabricated work to greatest extent practical. Allow for field glazing (or reglazing) of in-place screen assembly.
   1. Steel Fabrication: Fabricate framing from ASTM A36 steel tubes, plates and channels of welded construction, as indicated. Fabricate to sizes, shapes, and profiles indicated and as necessary to integrate with casework construction. Cut, drill, and tap units to receive fasteners and anchorage. Shop prime fabrications prior to installing in casework assemblies. Provide glazing channel and gasketing detail to permit reglazing.

a. Confirm indicated glazing channel glazing width is suitable for glazing product, tape and gasketing recommended by glazing manufacturer for application. Adjust as required.

2. Security Glazing: Provide 13/16-inch thick glass-clad polycarbonate glazing consisting of 1/8-inch tempered or chemically strengthened glass; and three 1/8-inch polycarbonate cores laminated in four layers of special interlayer material. Conform to ASTM F1915; Grade 3, 30-minute Impact Test. Provide products equal to those of Guardue/Viracon and Secure Tem + Poly/Globe-Amerada Glass Company. Provide finished edge on exposed top side of glazing.

3. Provide glazing tapes, gaskets and accessories required for glazing and acceptable to glazing manufacturer for application.

D. Solid Surfacing:
1. Solid-Surfacing Material: Homogeneous ½" thick solid sheets of filled plastic resin complying with ISSFA-2. Provide custom application to achieve 1 ½" edge thickness profile as indicated on drawings.
2. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
   a. Avonite; Avonite, Inc. *Greenguard certified
   b. E. I. du Pont de Nemours and Company. ("Corian") *Greenguard certified (color selected from price groups A-E)
   c. c. Formica Corporation. *Greenguard certified
   d. d. Samsung; Cheil Industries Inc. (Staron)
3. Type: Standard type.
4. Colors and Patterns: As selected by Architect from manufacturer's full range.

2.7 SHOP FINISHING

A. Quality Standard: Comply with AWI Section 1500, unless otherwise indicated.
B. General: Shop finish transparent finished interior architectural woodwork at fabrication shop as specified in this Section.
C. Preparations for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing architectural woodwork, as applicable to each unit of work.
   1. Backpriming: Apply one coat of sealer or primer, compatible with finish coats, to concealed surfaces of woodwork. Apply two coats to back of paneling and to end-grain surfaces.
D. Transparent Finish: Comply with requirements indicated below for grade, finish system, staining, and sheen, with sheen measured on 60-degree gloss meter per ASTM D 523:
   1. Grade: Premium.
   2. AWI Finish System TR-4: Conversion varnish.
   3. Staining: Provide proposed match samples to existing building. Match approved sample for color.
   4. Wash Coat for Stained Finish: Apply a vinyl wash coat to woodwork made from closed-grain wood before staining and finishing.
   5. Sheen: Satin, 30-50 gloss units.

PART 3 – EXECUTION

3.1 PREPARATION

A. Condition woodwork to average prevailing humidity conditions in installation areas before installation.

B. Before installing architectural woodwork, examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming.

3.2 INSTALLATION

A. Quality Standard: Install woodwork to comply with AWI Section 1700 for the same grade specified in Part 2 of this Section for type of woodwork involved.

B. Install woodwork level, plumb, true, and straight. Shim as required with concealed shims. Install level and plumb (including tops) to a tolerance of 1/8 inch in 96 inches.

C. Scribe and cut woodwork to fit adjoining work, and refinish cut surfaces and repair damaged finish at cuts.

D. Anchor woodwork to anchors or blocking built in or directly attached to substrates. Secure with countersunk, concealed fasteners and blind nailing as required for complete installation. Use fine finishing nails or finishing screws for exposed fastening, countersunk and filled flush with woodwork and matching final finish if transparent finish is indicated.

E. Countertops: Anchor securely by screwing through corner blocks of base cabinets or other supports into underside of countertop.

1. Install countertops with max. 1/8 inch in 96-inch sag, bow, or other variation from a straight line.

F. Complete the finishing work specified in this Section to extent not completed at shop or before installation of woodwork. Fill nail holes with matching filler where exposed. Apply specified finish coats, including stains and paste fillers if any, to exposed surfaces where only sealer/prime coats were applied in shop.

3.3 ADJUSTING AND CLEANING

A. Repair damaged and defective woodwork, where possible, to eliminate functional and visual defects; where not possible to repair, replace woodwork. Adjust joinery for uniform appearance.

B. Clean, lubricate, and adjust hardware.

C. Clean woodwork on exposed and semi-exposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

END OF SECTION 06402